THE ECONOMIC IMPACT OF PORTSMOUTH INTERNATIONAL PORT

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EXECUTIVE SUMMARY

This report provides an assessment of the economic impact of Portsmouth International Port in both the local and national economy. Our economic impact assessment considers three channels of impact—direct, indirect (via the Port’s supply chain), and induced (through wage-related spending). The impact of the Port is quantified both in terms of its GDP contribution, and the employment it supported, in the 2017/18 financial year.

We calculate the Port’s total contribution to GDP in the Portsmouth City Council area in 2017/18 was £189 million. Of this, the direct contribution of businesses based at the Port was £135 million, with every £1 million they contributed to GDP supporting a further £0.4 million in indirect and induced impacts. This means the Port’s “local GDP multiplier” is 1.4.

We find that the Port’s contribution to GDP supported a total of 2,410 jobs in the Portsmouth City Council area in 2017/18. Businesses based at the Port directly employed some 1,420 people, while a further 1,000 jobs were supported in the supply chain and through wage-related spending (see Fig. 1). The Port’s “local employment multiplier” is therefore estimated to be 1.7.

Fig. 1. Economic contribution of Portsmouth International Port in the Portsmouth City Council area, 2017/18

The footprint of the Port at a national level is larger still, contributing £390 million to UK GDP and sustaining 5,590 jobs in 2017/18. This greater UK-level impact reflects the extent to which the Port’s supply chains, and the consumption of its workers, spreads over the wider South East region and across the nation. We estimate that, for every £1 million the Port contributed to the UK economy directly, it sustained another £1.9 million elsewhere in the UK economy—giving it a UK GDP multiplier of 2.9. The Port’s UK employment

1 Figures may not sum due to rounding.
The Economic Impact of Portsmouth International Port

The multiplier is 3.9, meaning that for every job the Port directly contributes to the UK economy, a further 2.9 jobs were sustained elsewhere in the UK economy.

However, the importance of Portsmouth International Port to both the local and national economies stretches far beyond these core economic impacts. The Port plays a key role in facilitating domestic and international trade, handling almost four million tonnes of cargo in 2017. Its trade with non-EU countries that year was valued at almost £700 million, having grown by 34 percent since 2000.

The Port is a vital hub for many products brought into the UK, especially fruit and vegetables imported from outside the European Union. In 2017, it was the fourth-largest UK port for the import of non-EU fruit and vegetables (in value terms) and handled more than half of all non-EU bananas. Indeed, over 85 percent of the Port’s non-EU imports that year were food and live animals, for a total value exceeding £450 million.

Portsmouth International Port also serves as a vital outlet for international, domestic, and cruise passenger travel. It is the third-largest UK port in terms of international short sea passengers, serving more than 1.8 million passengers in 2017 across its six routes to France and Spain. The Port also served 4.4 million passengers to and from the Isle of Wight that year, while 2.7 million passengers used the local Gosport ferry, and 50,000 passengers travelled to and from the Channel Islands. In the 2017/18 financial year, around 16,000 individuals travelled on international cruises from the Port.
1. INTRODUCTION

Oxford Economics has been commissioned to provide an up-to-date assessment of the economic contribution of Portsmouth International Port. This report explores the Port’s impact both on the UK as a whole, and within the local Portsmouth City Council area (see Fig. 2). Our analysis measures the total impact over three “core” channels, in terms of their contributions to annual GDP and employment.

Beyond its core economic impact, Portsmouth International Port is also a key trading hub for the south coast of England. It facilitates the UK’s import and export of a wide range of products, including clothing and road vehicles but most notably fruit and vegetables. This study therefore also presents an analysis of the nature and scale of trade handled by Portsmouth International Port, in terms of the volume of freight handled by cargo type and the value of non-EU trade disaggregated by products.

Furthermore, we explore the importance of the Port to both international and domestic passenger travel. Portsmouth International Port is a key outlet for passenger travel, offering international routes to France and Spain, ferries to the Channel Islands, Isle of Wight and Gosport, and cruise trips across the globe. The spending of these passengers in the local area represents a further aspect of the Port’s contribution to the local economy.

Fig. 2. Map of the Portsmouth City Council area
OVERVIEW OF PORTSMOUTH INTERNATIONAL PORT

While Portsmouth has a rich naval heritage, maritime trade and passenger services are the core activities undertaken at Portsmouth International Port. Established as a municipal port in 1839 under the Camber Act, the original port was set up to collect dues in the town that developed around the Camber and regulate its use. Today it offers routes to France, Spain, the Channel Islands, the Isle of Wight, and neighbouring Gosport, as well as providing commercial international freight services.

Portsmouth International Port comprises three revenue generating areas:

- **The Cruise and Ferry Port**—serving ferry sailings to the continent and the Channel Islands, as well as regular cruise ship visits;
- **Albert Johnson and Flathouse Quays**—predominantly handling non-EU freight trade that enters and leaves the Port; and
- **The Camber**—which facilitates the Isle of Wight ferry crossing, and also caters for fishing boats and private pleasure craft.

The Cruise and Ferry Port is 44 acres in size and has five berths, which between them can accommodate a wide range of vessels. A new cruise/passenger terminal opened in 2011, expanding the passenger capacity to 2,400 people. Two ferry companies operate from this terminal: Brittany Ferries servicing routes to France and Spain, and Condor Ferries to the Channel Islands. This terminal also handles all cruise ship calls into the city.

The two commercial wharves at Portsmouth International Port (Albert Johnson and Flathouse Quays) are leased to Portico Shipping Ltd, which manages them as berth operators. All freight trade entering or leaving the Port is handled in one of these commercial wharves. The importation of fruit and vegetables is a major source of trade for the Port, which now boasts an eight-hectare fruit and vegetable importing facility, including temperature-controlled warehouses to facilitate the transportation and storage of fresh produce.

The Camber, one of the oldest parts of the Port, offers a range of port functions. Berths are available for small vessels, fishing boats, and/or private leisure boats as well as pontoon moorings. Two additional berths are leased to Wightlink, which operates year-round ferries to Fishbourne on the Isle of Wight.
AN INTRODUCTION TO OUR ECONOMIC IMPACT ANALYSIS

The economic benefits of Portsmouth International Port are assessed using a standard means of analysis called an economic impact assessment. This involves quantifying the Port's impacts across three "core" channels, consisting of:

- **Direct impact**, which relates to Portsmouth International Port’s own activities. It encompasses the economic activity and employment supported directly by companies operating within the Port.

- **Indirect impact**, which encapsulates the economic activity and employment supported in the supply chain of the companies located within the Port, as a result of their procurement of goods and services from other UK companies. This includes capital expenditure with other UK companies.

- **Induced impact**, which comprises the wider economic benefits that arise when workers within the Port, and its supply chain, spend their earnings, for example in retail and leisure establishments.

The sum of these channels constitutes Portsmouth International Port’s total economic impact. Two main metrics are used to present a picture of the Port’s annual economic contribution:

- **GDP**—or more specifically, the *gross value added (GVA)* contribution to GDP.\(^2\)

- **Employment**—measured on a headcount basis.

The modelling is conducted for two separate geographies: the Portsmouth City Council area, and the whole of the UK. Therefore, two input-output models were used, each specific to the geographies covered in the scope of this project. These models were constructed by Oxford Economics, using sub-regional and national macroeconomic and employment data sourced from UK business and household surveys, including the Business Register and Employment Survey (BRES), and the Annual Survey of Household Earnings (ASHE).

Fig. 3, overleaf, sets out how the various channels of a standard economic impact study relate to one another.

**Note:** in common with standard practice for this type of study, our analysis has been carried out on a *gross*, rather than *net*, basis. That is, we do not make any assumptions concerning the extent to which the economic activity associated with Portsmouth International Port would occur if the Port did not exist.\(^3\) Further details about our economic impact methodology are included in the Appendix of this report.

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\(^2\) GDP, or Gross Domestic Product, is the total value of final goods and services produced in an economy over a given period. GVA plus taxes on products minus subsidies on products is equal to GDP. Total aggregates of taxes and subsidies are only available for the national economy, so industry and regional measures of economic activity are measured using GVA.

The contribution of an individual producer, industry or sector to GDP can be understood as either: (i) the value of output (goods or services) less the value of intermediate inputs used in the production process; or (ii) the sum of compensation of employees (predominantly gross wages) and gross operating surplus.

\(^3\) The difference between the two approaches is whether account is taken of what the resources used in the operation of the port could alternatively be deployed to do. A gross study ignores alternative uses, whilst a net study estimates the impact created by the port in excess of that which would arise if the resources were deployed...
in their second most effective use. Such a net approach is considerably more complex and likely to involve greater controversy since it relies on constructing a counterfactual to reflect how resources might have been deployed if the port did not exist. Views of what may constitute a plausible counterfactual are likely to differ.
2. ECONOMIC IMPACT ANALYSIS

In this chapter, we present our estimates of Portsmouth International Port’s economic footprint, in terms of its contribution to UK and local economic activity (as measured by GDP) and the employment it supports. In so doing, we consider the complex interconnected supply chains of the companies operating within the boundary of the Port, as well as the spending of workers employed at the Port and in its supply chain. In this way, we can account for the full contribution of the activities undertaken within the Port, and how their impact spreads across both the local and national economies.

The economic impact analysis presented in this chapter was informed by a bespoke survey of companies operating at Portsmouth International Port. This enabled us to estimate the gross value added (GVA) contribution to GDP generated by the firms’ operations within the Port, and the level of employment they supported. More details on the data and methodology used in this study can be found in the Appendix.

2.1 DIRECT IMPACT

The activities undertaken by firms operating within Portsmouth International Port provide the starting point for our economic impact analysis. We explored this through a survey of firms operating at the Port and used secondary sources to fill gaps in cases where firms did not respond. On this basis, we estimate that Portsmouth International Port’s direct contribution to UK GDP reached £135 million in the 2017/18 financial year. Firms at the Port also supported employment for around 1,420 people within the Port estate (on a headcount basis).

Almost 90 percent of those working at Portsmouth International Port work in the transport sector, equivalent to 1,260 people (see Fig. 4). In turn, roughly half of these transport sector workers are employed by ferry companies. The 160 individuals that work outside the transport sector are spread across sectors such as retail & wholesale, accommodation & food services, and administrative services.
2.2 INDIRECT IMPACT

To support their operations at Portsmouth International Port, companies based at the Port purchase millions of pounds' worth of inputs. To assess the extent and distribution of these supply chains, we used information from our bespoke survey detailing the value and locations of companies' supply chain spending.\(^4\)

2.2.1 Estimated procurement expenditures

In the 2017/18 financial year, we estimate that just under £185 million was spent by companies based at Portsmouth International Port on domestic inputs. This estimate was informed by responses to our bespoke survey regarding procurement spend of companies based at the Port and published data from the UK Annual Business Survey.

Over 85 percent of this domestic intermediate spend (£157 million) was operational procurement, while the remaining £26 million was capital expenditure (see Fig. 5). £15 million of operational purchases were spent with other companies within the Port itself, and a further £65 million of operational purchases were fulfilled by local suppliers elsewhere in the Portsmouth City Council area.

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\(^4\) Supply chain spending was broken down into four geographies: Portsmouth International Port, Portsmouth City Council, rest of the UK, imports.
Over 40 percent of UK operational inputs purchased by companies at Portsmouth International Port were from suppliers in the transport & storage sector, equivalent to £68 million (see Fig. 6). A further £23 million of purchases by Port companies were made from suppliers in the manufacturing sector, while £19 million worth of inputs were purchased from the administrative services sector.

Focusing in on suppliers located within the Portsmouth City Council area reveals a similar picture. Suppliers in the transport & storage, administrative services, and manufacturing sectors are the largest suppliers to companies based in Portsmouth International Port (represented by the light blue bars on Fig. 6).

Source: Oxford Economics analysis of bespoke survey and Annual Business Survey
Companies located in Portsmouth International Port purchased an estimated £16 million of capital goods from the manufacturing sector in 2017/18, with local suppliers supplying almost one-third of these purchases. (Fig. 7). Capital investments from the construction sector totalled a further £10 million.

Fig. 7. Estimated capital expenditure of companies at Portsmouth International Port, by sector and geography of supplier, 2017/18

The purchases described above represent the first stage in Portsmouth International Port’s supply chain network, and the initial link to understanding its wider economic impact. The companies supplying goods and services to businesses at the Port will make their own purchases, stimulating activity along the full length of the Port’s UK-based supply chains. We have estimated the impact of this supply chain spending, known as the indirect impact, using input-output (I-O) tables, which map the purchases of each sector from other sectors of the economy. We can then assess how much of this impact is captured within the Portsmouth City Council area using Oxford Economics’ sub-regional input-output (I-O) models.

2.2.2 Indirect contribution to the UK economy

The supply chains of Portsmouth International Port contributed an estimated £143 million to UK GDP in the 2017/18 financial year. Fig. 8 shows the distribution of this UK activity across sectors. While the indirect impact spans every broad sector of the UK economy, almost a quarter of this activity was concentrated in the transport & storage sector.

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5 In estimating the indirect impact, the supply chain spending will exclude any money companies based at Portsmouth International Port spent with other companies based at the Port. This is to avoid double-counting activity which is already captured in the direct impact.
Once the indirect impacts have been estimated in GDP terms, data on productivity in UK sectors can be used to estimate the number of jobs supported in the supply chain. In this way we estimate that economic activity in the supply chains of companies at Portsmouth International Port supported 2,430 jobs. As with the indirect GDP contribution, the transport & storage sector made the largest indirect employment contribution (see Fig. 9). Contributing just under 20 percent of indirect employment, administrative services was estimated to have been the second-largest supporter of jobs, with a further 14 percent sustained in the professional services sector.

**Fig. 8. Sectoral distribution of Portsmouth International Port’s indirect GDP contribution in the UK, 2017/18**

**Fig. 9. Sectoral distribution of Portsmouth International Port’s indirect employment contribution in the UK, 2017/18**

Source: Oxford Economics
2.2.3 Indirect contribution to the Portsmouth City Council area

To estimate the indirect impact accruing within the Portsmouth City Council area, we first estimate the procurement spend that goes to firms outside the Port, but within the Portsmouth City Council area. This represents the first round of the supply chain impact. The companies supplying goods and services to businesses at the Port will then make their own purchases, some of which may be within the Portsmouth City Council area, whilst others “leak” out to the rest of the UK or abroad. We use Oxford Economics’ sub-regional I-O models to assess how much of the Port’s UK indirect (supply chain) impact is captured within the Portsmouth City Council area.

On this basis, we estimate that around one-quarter of the UK-wide indirect GDP contribution accrued within the Portsmouth City Council area. This value-added figure amounted to around £36 million in the 2017/18 financial year—over half of which was within the transport & storage, administrative services and manufacturing sectors (see Fig. 10).

Our modelling of the indirect impact in the Portsmouth City Council area reflects the nature of the supply chain specific to the locality, and therefore the sectoral distribution of the indirect impact differs to that estimated for the UK. For example, a smaller share of the indirect impact in the Portsmouth City Council area is in professional services, relative to the whole of the UK. In contrast, real estate is more prominent in the local supply chains of Port-based companies, meaning its indirect impact is relatively greater in the Portsmouth City Council area than for the whole of the UK.

Fig. 10. Sectoral distribution of Portsmouth International Port’s indirect GDP contribution in the Portsmouth City Council area, 2017/18

Of the 2,430 jobs supported across the length of Portsmouth International Port’s UK supply chains, an estimated 670 jobs were within the Portsmouth

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6 Money spent with other companies in the Port is not included as this is accounted for in the direct effect.
City Council area. The activity of Portsmouth International Port's local supply chains supported the largest number of jobs in the transport & storage (see Fig. 11). Along with the administrative services sector, these two sectors accounted for over 60 percent of the indirect employment contribution that Portsmouth International Port made within the Portsmouth City Council area in 2017/18.

**Fig. 11. Sectoral distribution of Portsmouth International Port’s indirect employment contribution in the Portsmouth City Council area, 2017/18**

2.3 **INDUCED IMPACT**

Together, the direct and indirect activity linked to Portsmouth International Port supports thousands of jobs. The spending of wages earned by those employed both directly within the Port and indirectly in its supply chains represents the final channel of economic impact—the induced impact.

2.3.1 **Induced contribution to the UK economy**

The induced contribution of Portsmouth International Port to UK GDP is estimated to have been £112 million in the 2017/18 financial year. Perhaps unsurprisingly, the sectors where this induced impact was felt most heaviest were those where households spend the majority of their income—for example, real estate and retail & wholesale (see Fig. 12). In all, these sectors accounted for more than 40 percent of the total induced contribution to UK GDP that year.
As with the indirect impacts, once the induced impacts have been estimated in terms of GDP, labour productivity data can be used to estimate the number of jobs supported in each sector. The wage-financed consumption of Port workers and those in its UK supply chain supported a total of 1,740 jobs in the UK. Almost one-quarter of these jobs were in the retail & wholesale sector (see Fig. 13). Taken together, the accommodation and food & administrative services sectors contributed a further 25 percent of the induced employment contribution in the UK.
2.3.2 Induced contribution to the Portsmouth City Council area

As part of our bespoke survey, companies based at the Port indicated the proportion of their workers who live within the Portsmouth City Council area. This information was used to estimate the total wages and salaries paid by companies based at the Port to workers who live in the area. The extent and nature of the induced contribution to the local economy could then be calculated.

We estimate that the wage-financed consumption of workers based at Portsmouth International Port, and in its local supply chain, contributed £18 million to the local economy in 2017/18 (see Fig. 14). This is equivalent to over 15 percent of the total induced contribution to UK GDP that year.

In employment terms, we estimate that 330 jobs were supported in the Portsmouth City Council area in 2017/18 as a result of the induced impact of Portsmouth International Port (see Fig. 14). The sectoral distribution of the local induced impact is very similar to that for the UK-wide induced impact, because they both draw heavily on the typical consumption patterns of UK households.

Fig. 14. Portsmouth International Port’s induced impact in the Portsmouth City Council area, 2017/18

2.4 OVERALL ECONOMIC IMPACT

Adding together the direct, indirect and induced impacts gives the total economic contribution of Portsmouth International Port to both the local and UK economies.

2.4.1 Overall contribution to the UK economy

The total gross value added contribution to UK GDP of Portsmouth International Port is estimated to have been £390 million in the 2017/18 financial year. This means that, for every £1 million Portsmouth International
Port contributes to the UK economy itself, it creates another £1.9 million elsewhere in the UK economy. It therefore has a “UK GDP multiplier” of 2.9.

In employment terms, Portsmouth International Port is estimated to have supported a total of 5,590 jobs in the UK in 2017/18. These jobs were supported either directly through the Port’s own activities, or indirectly through its supply chain and worker spending (induced) effects. The Port’s “UK employment multiplier” is estimated to be 3.9, meaning that for every job in the Port, a further 2.9 jobs are supported elsewhere in the UK economy.

Fig. 15. Total economic contribution of Portsmouth International Port in the UK, 2017/18 7

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2.4.2 Overall contribution to the local economy

Portsmouth International Port’s total gross value added contribution to the local economy (given by the Portsmouth City Council area) is estimated to have been £189 million in the 2017/18 financial year. Every £1 million Portsmouth International Port directly contributed to the local economy stimulated a further £0.4 million in indirect and induced impacts. This means its “local GDP multiplier” is estimated to be 1.4.

In the 2017/18 financial year, Portsmouth International Port is estimated to have supported 2,410 jobs in the local economy. Almost 45 percent of Portsmouth International Port’s contribution to UK jobs is therefore within the Portsmouth City Council area. The Port directly employs some 1,420 people, while a further 1,000 jobs are supported in the local area in its supply chain and through wage-financed spending. This means the Port’s “local employment multiplier” is estimated to be 1.7.

7 Figures may not sum to total due to rounding.
Fig. 16. Total economic contribution of Portsmouth International Port in the Portsmouth City Council area, 2017/18

Figures may not sum to total due to rounding.

Source: Oxford Economics

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\(^8\) Figures may not sum to total due to rounding.
3. TRADE FLOWS HANDLED AT THE PORT

The economic importance of Portsmouth International Port reaches far beyond the core economic impacts presented in Chapter 2, due to its role in facilitating domestic and international trade. The Port handles goods from a wide range of origins, from Europe to as far afield as South America and Africa. It is a vital hub for many products brought into the UK, especially fruit and vegetables imported from outside the European Union.

In this chapter, we analyse the volume of cargo handled by Portsmouth International Port, how this has changed over time, and investigate how cargo volumes at Portsmouth compare to other UK ports. We then look deeper into the composition of the Port’s cargo, both in terms of the categories handled, and the origins and destinations of this cargo.

A NOTE ABOUT DATA SOURCES

No single data source gives us a complete picture of the trade passing through Portsmouth International Port. We have therefore sought to combine information from a number of sources to provide insights into the volumes, types, origins, destinations and value of cargo passing through the Port. The data sources we have analysed in this chapter are:

- **Department for Transport port freight statistics**
  This data source presents the volume of trade passing through each UK port, split by cargo type, direction and trading partner. Data are available for all global trading partners, so it has the benefit of capturing the entire volume of cargo passing through Portsmouth International Port. However, data is only presented according to volume, rather than value, of cargo passing through the Port. Data can provide insights into the types of cargo handled by the Port but not the types of goods.

- **HMRC overseas trade statistics**
  This data source presents the value of non-EU trade passing through each UK port, split by product type, direction and trading partner. Only non-EU trade is captured in this dataset, so it presents a partial picture of the trade passing through the Port. However, this data source provides a lens into the value of trade handled by the Port as well as the specific products being traded.
3.1 VOLUME OF CARGO FLOWING THROUGH PORTSMOUTH INTERNATIONAL PORT

In 2017, Portsmouth International Port handled 3.9 million tonnes of goods, making it the 25th largest UK port in terms of cargo volume. This level of activity puts Portsmouth International Port on a similar scale to ports such as Aberdeen and Newport (Fig. 17).

Fig. 17. Volume of cargo, by UK port (2017, outward plus inward)$^9$

Portsmouth International Port is a key outlet for waterborne trade on the south coast of England. Behind Southampton, it handled the second largest volume of cargo in 2017 amongst ports located on the south coast, equivalent to nine percent of volume passing through these ports (see Fig. 18).

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$^9$ Cargo volumes are measured in gross tonnes.
We can gain further insights into the evolving importance of Portsmouth International Port to the UK’s waterborne trade by assessing trends over time. Volumes declined slightly from a peak of 4.9 million tonnes in 2004 to 3.5 million tonnes in 2012, consistent with the pattern observed across all UK ports. However, volumes handled by Portsmouth International Port since 2012 have gradually grown to reach 3.9 million tonnes in 2017, predominantly driven by inward trade (see Fig. 19). Cargo volumes associated with inward trade grew by 14 percent from 2012 to 2017 and, as of 2017, inward trade accounted for two-thirds of cargo volume handled by Portsmouth International Port.

Fig. 18. Volume of cargo handled by ports on the south coast (2017, outward plus inwards)

Fig. 19. Volume of cargo handled by Portsmouth International Port, by direction (2000–2017)
The evolution of trading volumes handled across all UK ports is similar to that at Portsmouth International Port—peaking in 2005, gradually falling until 2012, then stabilising. As such, the relative contribution of Portsmouth International Port to the UK’s waterborne trade volume has remained fairly stable. Since 2000, Portsmouth International Port has accounted for between 0.7 percent and 0.9 percent of the volume of all UK waterborne trade (Fig. 20).

**Fig. 20. Portsmouth International Port’s share of cargo volume in all UK ports (%)**

Source: DfT Port Freight Statistics

### 3.2 TYPES OF CARGO FLOWING THROUGH THE PORT

The analysis presented in Section 3.1 provides a high-level perspective of the scale of operations at Portsmouth International Port, by focusing on total cargo volumes. In this section, we analyse the distribution of trade across different types of cargo and compare this to the overall pattern of UK goods trade.
HOW CARGO IS CATEGORISED

The Department for Transport categorises cargo into six groups, according to how it is handled at ports.\(^\text{10}\) Fig. 21 shows how these main cargo groups are broken down into more granular categories; we use this framework throughout this section.

Fig. 21. Cargo categorisation in port freight statistics

<table>
<thead>
<tr>
<th>Cargo group</th>
<th>Cargo category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry bulk</td>
<td>Agricultural products (e.g. grain, soya, tapioca), coal, ores, other dry bulk.</td>
</tr>
<tr>
<td>Liquid bulk</td>
<td>Crude oil, liquefied gas, oil products, other liquid bulk products.</td>
</tr>
<tr>
<td>Load-on/load-off</td>
<td>20' freight units, 40' freight units, freight units &gt;20' &amp; &lt;40', freight units &gt;40'.</td>
</tr>
<tr>
<td>Other general cargo</td>
<td>Forestry products, iron and steel products, other general cargo &amp; containers &lt;20'.</td>
</tr>
<tr>
<td>Roll-on/roll off (non self-propelled)</td>
<td>Other mobile non self-propelled units, rail wagons, shipborne port to port trailers, and shipborne barges engaged in goods transport, unaccompanied caravans and other road, agricultural and industrial vehicles, unaccompanied road goods trailers &amp; semi-trailers.</td>
</tr>
<tr>
<td>Roll-on/roll off (self-propelled)</td>
<td>Import/export motor vehicles, live animals on the hoof, other mobile self-propelled units, passenger buses, passenger cars, motorcycles and accompanying trailers/caravans, road goods vehicles with or without accompanying trailers.</td>
</tr>
</tbody>
</table>

Source: DfT Port Freight Statistics

Just under half of the volume of trade handled by Portsmouth International Port in 2017 was roll-on roll-off (ro-ro) self-propelled cargo (see Fig. 22). This primarily includes cargo transported on road goods vehicles, road goods trailers, and in passenger cars.

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\(^{10}\) A breakdown by types of product traded is not available within this dataset.
Ro-ro self-propelled cargo is also the cargo group that Portsmouth International Port handles most relative to other UK ports, accounting for more than 3.5 percent of UK inward cargo volume and three percent of UK outward cargo volume (see Fig. 23). Additionally, the Port conducts significant operations for the import of “other general cargo”, handling more than 3.5 percent of UK inward waterborne trade volume for this cargo group.

Fig. 23. Portsmouth International Port’s share of inward and outward cargo volume in all UK ports, by cargo group (2017)

11 DfT port freight statistics includes a category for “Dry Bulk”, but analysis of Portsmouth International Port’s own statistics shows that in the context of Portsmouth this is predominantly ballast. We have therefore relabelled the category as such.
By disaggregating the cargo groups presented in Fig. 22 and Fig. 23, we can obtain further insights into the nature of cargo handling operations at Portsmouth International Port. In 2017, 1.8 million tonnes of cargo was transported on road goods vehicles,\(^\text{12}\) equivalent to over 45 percent of the total cargo volume passing through the Port (see Fig. 24). A further 0.8 million tonnes of cargo carried on unaccompanied road goods trailers and semi-trailers\(^\text{13}\) passed through the Port in 2017.

**Fig. 24. Volume of cargo handled by Portsmouth International Port, by cargo category (2000–2017)**

[Graph showing cargo volumes handled by different categories]

When analysed relative to UK-wide cargo volumes, Portsmouth International Port contributes most, relatively, towards the handling of “other general cargo & cargo in containers smaller than 20 feet” (see Fig. 25). Over eight percent of the UK’s waterborne trade volume for this cargo category was handled by the Port in 2017. It also handles a significant share of UK ro-ro cargo volumes, including cargo carried on road goods vehicles and unaccompanied road goods trailers. The four cargo categories presented in Fig. 25 have been selected because they represent those for which Portsmouth International Port handles most cargo, relative to UK-wide waterborne trade volumes.

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\(^{12}\) ro-ro self-propelled.

\(^{13}\) ro-ro non-self-propelled.
Fig. 25. Portsmouth International Port’s share of total cargo volume in all UK ports, by selected cargo categories (2000-2017)

Fig. 26. Volume of outward cargo from Portsmouth International Port, by region (2000-2017)

3.3 GLOBAL TRADING LINKS OF PORTSMOUTH INTERNATIONAL PORT

Portsmouth International Port has trade links spanning much of the globe but has retained its strongest ties with the European Union and the rest of the UK. 66 percent of cargo volume leaving Portsmouth International Port in 2017 headed to the European Union and a further 27 percent was shipped to other UK ports (Fig. 26). The remaining cargo was transported to the Americas, other European countries, and Africa.

The European Union is also the largest source of cargo coming into Portsmouth International Port, albeit this is a smaller share than outward cargo.
Just over half of inward cargo volume in 2017 came from the European Union (see Fig. 27). In contrast to outward trade, however, the Port imports a significant proportion of cargo from the Americas—in 2017, these imports accounted for more than one-fifth of all cargo volume coming into the port.

Trade volumes with the Americas grew rapidly from 2000 to 2005—increasing tenfold—but have since stabilised at around 600,000 tonnes per year. Cargo entering Portsmouth International Port from the UK accounted for over 20 percent of the Port’s inward volume in 2017. However, it should be noted that the majority of this volume is sea-dredged ballast rather than cargo transported from other UK ports.

**Fig. 27. Volume of inward cargo to Portsmouth International Port, by region (2000-2017)**

The pattern of Portsmouth International Port’s trade links with regions across the globe has some noticeable differences to the picture for the UK as a whole (Fig. 28). In common with the overall trend for UK ports, Portsmouth International Port conducts more of its trade, in volume terms, with the European Union than any other region. However, the relative importance of the European Union is greater for Portsmouth International Port, accounting for 56 percent of cargo volume in 2017, compared to 44 percent across other UK ports. Portsmouth International Port also has an above-average proportion of trade with the Americas.
3.4 VALUE OF NON-EU TRADE FLOWING THROUGH THE PORT

The analysis presented so far in this chapter has focused on trade volumes. Further insights can be obtained through analysis of the value of the goods handled by UK ports. Such data are available from the HMRC Overseas Trade Statistics and can be disaggregated by types of product being traded, although coverage is limited to non-EU trade. So, while this data source does not provide a comprehensive account of all trade at UK ports, it does enable us to further develop our understanding of the role that Portsmouth International Port plays within the UK’s international trade.

In 2017, Portsmouth International Port handled almost £700 million of cargo imports from and exports to non-EU countries. Imports made up three-quarters of this total, equivalent to £515 million (Fig. 29). Since 2000, the value of non-EU trade handled by Portsmouth International Port has risen 34 percent, or by an average of 1.7 percent per year. This growth has been driven by imports from non-EU countries which almost doubled from £275 million in 2000 to £515 million in 2017.
Fig. 29. Value of non-EU trade handled by Portsmouth International Port, by direction (1996 – 2017)

Given the relative importance of imports, we have analysed the underlying product distribution of non-EU imports to establish the nature of the trade handled by Portsmouth International Port. Fig. 30, below, illustrates that over 85 percent of the value of non-EU imports handled by Portsmouth International Port in 2017 was in food and live animals, totalling over £450 million. This is more than 10 times the value of the next largest product category, miscellaneous manufactured articles, for which £44 million worth of cargo was imported from outside the EU.

Fig. 30. Value of non-EU imports handled by Portsmouth International Port in 2017, by product category

Source: HMRC Overseas Trade Statistics

14 Using Standard International Trade Classification (SITC1)
A more detailed interrogation of the HMRC data enables us to identify the detailed products which Portsmouth International Port imported in 2017. Bananas worth more than £330 million were imported into the UK through Portsmouth International Port, equivalent to more than 70 percent of the total value of non-EU imports into the Port (Fig. 31). Six of the 10 largest imports into the Port by value were fruit or vegetables, with the other four products being flowers and categories of women’s clothing.

The Port’s focus on the import of fruit and vegetables is reflected in the infrastructure at the Port. Investments into the Port infrastructure have funded the development of an eight-hectare fruit and vegetable importing facility.\(^\text{15}\) In addition, specialised temperature-controlled warehouses facilitate the storage of fresh produce imported into the Port prior to being transported across the rest of the UK.

**Fig. 31. Top-10 non-EU imports, by value, handled by Portsmouth International Port in 2017\(^\text{16}\)**

By analysing trade values relative to other UK ports, we can assess the importance of Portsmouth International Port to the UK’s trade in fruit and vegetables. In 2017, Portsmouth International Port was the fourth-largest UK port (by value) for non-EU trade in fruit and vegetables (Fig. 32). This placed it behind Felixstowe, London Gateway and London ports, but ahead of Southampton and Dover. Over 12 percent of the UK’s imports of fruit and

\(^{15}\) [https://www.portsmouth-port.co.uk/uploads/downloads/PORT_MASTER_PLAN_Final_10_10_11.pdf](https://www.portsmouth-port.co.uk/uploads/downloads/PORT_MASTER_PLAN_Final_10_10_11.pdf)

\(^{16}\) Imports of bananas totalled £333 million but axis has been trimmed for presentational purposes.
vegetables from outside the EU entered the country via Portsmouth International Port.

**Fig. 32. Value of non-EU trade in fruit and vegetables in 2017, by UK port**

We are also able to assess which products handled by Portsmouth International Port account for a relatively large share of the UK’s imports from non-EU countries. For example, the Port plays a significant role in the UK’s import of non-EU bananas, with more than half of all non-EU bananas imported in 2017 (by value) coming through Portsmouth International Port (see Fig. 33).

More than one-quarter of the UK’s non-EU imports of carrots, turnips, and similar edible roots was handled by Portsmouth International Port in 2017, and over 10 percent of the UK’s imports of tomatoes, dates, figs, pineapples, avocados, guavas, mangoes, and mangosteens from non-EU countries.
Fig. 33. Portsmouth International Port’s share non-EU imports in 2017, value, by detailed product category

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Share of Non-EU Imports (2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bananas</td>
<td>55%</td>
</tr>
<tr>
<td>Carrots, turnips and similar edible roots</td>
<td>26%</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>16%</td>
</tr>
<tr>
<td>Dates, figs, pineapples, avocados, guavas, mangoes and mangosteens</td>
<td>11%</td>
</tr>
<tr>
<td>Cut flowers and flower buds</td>
<td>9%</td>
</tr>
<tr>
<td>Other vegetables</td>
<td>8%</td>
</tr>
<tr>
<td>Citrus fruit</td>
<td>8%</td>
</tr>
<tr>
<td>Onions, shallots and other alliaceous vegetables</td>
<td>5%</td>
</tr>
<tr>
<td>Melons</td>
<td>5%</td>
</tr>
<tr>
<td>Artichoke, sweet potatoes and similar roots and tubers with high starch/insulin content</td>
<td>4%</td>
</tr>
<tr>
<td>Cabbages, cauliflowers and similar edible brassicas</td>
<td>2%</td>
</tr>
<tr>
<td>Leguminous vegetables</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: HMRC Overseas Trade Statistics

3.5 IMPORTANCE OF TRADE WITH THE CHANNEL ISLANDS

Portsmouth International Port is also a key outlet for goods being transported to and from the Channel Islands. No official statistics are available to show the volume or value of trade between Portsmouth International Port and the Channel Islands.

Nonetheless, in 2017 the UK traded a total of 782,000 tonnes of cargo with the Channel Islands, of which 674,000 tonnes were exports to the Channel Islands. The route between Portsmouth and the Channel Islands is serviced by Condor Ferries, who, in the 2017/18 financial year, shipped over 72,000 freight units. Their total export tonnage for 2017 amounted to 344,000 tonnes, equivalent to just over half of all UK trade volume to the Channel Islands. The nature of the goods being transported covers all aspects of life on the Channel Islands, including (but not limited to) cars, building products, food and drink, clothing, and utilities.

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17 Using Harmonised Commodity Description and Coding Systems (HS4)
18 DfT Port Freight Statistics.
19 Figure provided by Portsmouth International Port
20 Figure provided by Portsmouth International Port
4. PASSENGERS TRAVELLING THROUGH THE PORT

In addition to its importance for waterborne trade, Portsmouth International Port serves as a major hub for passengers travelling to Europe, the Isle of Wight, and the Channel Islands, and for those embarking on cruises. This throughput of passengers to and from the Port can bring tourism expenditure to the local area—if passengers stop off in Portsmouth before or after a trip, for example. In addition, this can bring benefits to the wider UK economy, by enabling inbound international passengers to come to the UK, and explore different parts of the country.

Such passenger spending may form a key element of the overall economic importance of Portsmouth International Port, both locally and nationally. Assessing the extent of passengers’ spending would require new primary research which goes beyond the scope of this study, but we are able to explore the scale and composition of passenger travel from the Port.

4.1 IMPORTANCE FOR INTERNATIONAL PASSENGER TRAVEL

4.1.1 International short sea passengers

Portsmouth International Port is an important hub for international short sea passengers, enabling over 1.8 million trips in 2017 (Fig. 34). This is equivalent to nine percent of all trips in 2017, and means that Portsmouth was the third-largest port for short sea passengers, behind only Dover (11.7 million) and Holyhead (1.9 million) (Fig. 35).

![Fig. 34. International short sea passengers, by port (2017)](image)

Portsmouth International Port’s share of UK passengers has remained fairly constant for the past 10 years, having grown steadily during the 1980s and 1990s (see Fig. 35).
Among the UK’s south coast ports—which also include Plymouth, Newhaven, Poole, Brighton, Southampton and Weymouth—Portsmouth International Port handles the most passengers. It accounts for almost two in every three passengers making international short sea journeys to or from south coast ports in 2017 (Fig. 36).

Portsmouth International Port currently offers six international ferry routes, four of which are to France (Caen, Cherbourg, Le Havre and St Malo), and two to Spain (Bilbao and Santander). Half of the passengers travelling on these routes in 2017 travelled to Caen, while St Malo was the second most popular destination, accounting for almost 20 percent of passengers (see Fig. 37).
A total of 1.6 million passengers travelled on routes to or from France and 260,000 passengers made trips to or from Spain.

**Fig. 37. Distribution of inbound and outbound passengers, by international ferry route at Portsmouth International Port (2017)**

The 1.6 million passengers travelling between Portsmouth International Port and France in 2017 represented 11 percent of all UK sea passengers travelling to or from France (Fig. 38). Portsmouth International Port was the second largest port in terms of passenger numbers to or from France, behind Dover which served almost 11.7 million passengers. By comparison, Portsmouth International Port is the prominent UK port for passengers travelling to or from Spain, catering for 80 percent of all UK ferry passengers.

**Fig. 38. Portsmouth International Port’s share of international short sea passengers, by destination country (2017)**

Source: DfT, Sea Passenger Statistics (Table 0102)

Source: DfT, Sea Passenger Statistics (Table 0108)
4.1.2 Cruise passengers

Portsmouth International Port also serves cruise passengers as a turnaround and calling port. In the 2017/18 financial year, there were 33 cruise calls at Portsmouth International Port carrying more than 16,000 passengers, of which almost 6,500 were embarkations on a turnaround day.\(^{21}\) Cruise passengers may contribute to the local economy if they stop off and spend money in Portsmouth before or after their cruise or if they visit Portsmouth during a cruise call.

While it was not possible to estimate the magnitude of cruise passengers’ spending in Portsmouth within the scope of the current study, recent research by Cruise Lines International Association (CLIA), a cruise industry trade association, estimated cruise passenger spending on European cruises.\(^{22}\) They estimated that, in 2017, cruise passengers spent an average of €81.86\(^{23}\) at embarkation port cities and then spent a further €64.37 at each port visit on their cruise itinerary. If these average values were applied to the number of cruise passengers calling at and embarking from Portsmouth, it would imply that cruise passengers spent around £1 million in Portsmouth in 2017/18.\(^{24}\)

This result should be regarded as indicative, since it relies on average values for European cruises rather than spending estimates specific to Portsmouth International Port cruise passengers. It does, nonetheless, provide suggestive evidence of the potential scale of the local tourism expenditure associated with the cruise operations of the Port.

4.2 IMPORTANCE FOR DOMESTIC PASSENGER TRAVEL

Alongside international travel opportunities, Portsmouth International Port provides a number of domestic ferry services to local residents and tourists alike. In particular, three services cater for passengers travelling to the Isle of Wight: a car ferry, a passenger ferry and hovercraft. A regular ferry service also operates between Portsmouth and Gosport.

In 2017, almost 4.4 million passengers travelled between Portsmouth International Port and the Isle of Wight across the three services. The most popular of these was the car ferry which served 2.3 million passengers, with a further 2 million passengers using the passenger ferry or hovercraft (see Fig. 39). An additional 2.7 million passengers made trips on the Gosport passenger ferry.

We have focused on the 2017 passenger numbers for consistency with the analysis elsewhere in this report, but data on domestic passengers in 2018 were also available at the time of writing. These show that the total number of trips made to or from the Isle of Wight was stable between 2017 and 2018, but there was a slight drop in trips made on the Gosport ferry with just over 2.5 million passengers using the service in 2018 (Fig. 39).

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\(^{21}\) Figures provided by Portsmouth International Port

\(^{22}\) Cruise Lines International Association, “Contribution of cruise tourism to the economies of Europe 2017” (Washington DC, 2018).

\(^{23}\) Excluding airfares

\(^{24}\) In 2017 prices.
More than four million passengers have travelled annually from Portsmouth International Port to the Isle of Wight in each of the past 16 years, except 2008 (Fig. 40). In 2017, over half of these passengers travelled on the car ferry and more than one-quarter travelled on the passenger ferry. Of all the passengers travelling across the Solent from Hampshire to the Isle of Wight in 2017, around half made the journey from Portsmouth International Port.

Data is available only back to 2003.
The Economic Impact of Portsmouth International Port

4.3 IMPORTANCE FOR PASSENGER TRAVEL TO THE CHANNEL ISLANDS

Portsmouth International Port also plays an important role in providing access by sea to the Channel Islands. In 2017, 50,000 passengers travelled to Guernsey and Jersey from Portsmouth, equivalent to one-fifth of UK sea passengers to the Channel Islands (Fig. 41). In 2016 and 2017, all other UK sea passengers to the Channel Islands travelled from Poole.

Fig. 41. Passengers to Channel Islands, by UK port

Source: DfT, Sea Passenger Statistics (Table 0201)
5. CONCLUSION

Portsmouth International Port makes an important economic contribution to the local and national economy, whether directly through the operations of firms based at the Port, or the wider effects of activity in their supply chain and workers’ spending.

We estimate that the Port’s total contribution to GDP in the Portsmouth City Council area was £189 million in the 2017/18 financial year (see Fig. 42). The direct activities of companies based at the Port contributed £135 million to GDP in the local area, with a further £54 million sustained through supply chain and worker spending multipliers. This contribution to GDP is estimated to have supported 2,410 jobs in the Portsmouth City Council area.

**Fig. 42. Economic contribution of Portsmouth International Port in the Portsmouth City Council area, 2017/18**

The economic impact of the Port’s supply chains, and of workers’ spending, spreads beyond Portsmouth into the wider South East region and the UK as a whole. The UK-level economic impact made by Portsmouth International Port is therefore much greater than the local impact. It is estimated that Portsmouth International Port contributed £390 million to UK GDP and supported 5,590 UK jobs in the 2017/18 financial year (see Fig. 43).
The Port also plays an important role in handling commercial freight being transported across the globe. In 2017, Portsmouth International Port handled 3.9 million tonnes of cargo, making it the second-largest south coast port in terms of cargo volume. Its trade with non-EU countries in the same year was valued at almost £700 million.

Most noticeably, Portsmouth International Port plays a key role in bringing fruit and vegetables to the UK. In 2017, it was the fourth largest UK port for the import of fruit and vegetables from outside the EU (by value), handling trade in these goods worth almost £450 million. In particular, the Port is the UK’s primary importer of bananas with more than half of all non-EU bananas entering the UK via Portsmouth International Port. The Port also handled a significant share of UK imports of other fruit and vegetables such as carrots and turnips.

Portsmouth International Port also serves large numbers of international and domestic ferry passengers, as well as cruise passengers. In 2017, more than 1.8 million passengers used Portsmouth International Port for short sea international travel to or from France and Spain; a further 4.4 million made trips to or from the Isle of Wight; 2.7 million used the Gosport ferry service; and 50,000 travelled to the Channel Islands.

The spending of these passengers may form a key element of the overall economic importance of the Port. Further research could shed further light on the tourism expenditure brought to the local area and the UK more broadly as a result of the spending of these passengers.

26 Figures may not sum due to rounding
27 In value terms
APPENDIX 1: METHODOLOGY

SURVEY OF COMPANIES BASED AT PORTSMOUTH INTERNATIONAL PORT

Oxford Economics designed a short survey questionnaire to gather financial, employment and procurement data from companies based within the Port. The survey was sent out to all those in this list in November 2018. A total of 23 companies were invited to participate and we received 13 responses.

In cases of non-response to the survey, headline financial information and employment data were obtained for each company from one of three sources depending on the nature of their operations. For companies whose sole operations take place within Portsmouth International Port, we referred to a business database, MINT, produced by Bureau van Dijk. This database presents headline financial and employment information for companies according to the location of their head office. We therefore could not use this database to extract the relevant information for companies who also have operations outside of Portsmouth International Port.

For companies which also have operations outside Portsmouth International Port, we undertook a scaled-back survey to request headcount employment figures from the relevant companies. Where this information was not forthcoming, Portsmouth International Port provided indicative estimates of headcount employment. These estimates were only required for five companies, with their total employment equating to four percent of all employment at the Port. As such, these estimates do not materially impact our findings.

For companies which did not provide survey responses, gross value added (GVA) estimates were produced by taking GVA per worker figures for the most relevant sector from the Annual Business Survey (ABS) and multiplying it by each company’s headcount employment figure.

ESTIMATING THE INDIRECT IMPACT

The first stage in calculating the indirect impact was to map the procurement breakdown, provided in the company-level survey described above, to Standard Industrial Classification (SIC) categories, enabling us to put the procurement data in a form consistent with Oxford Economics’ Input-Output (I-O) models.

For companies which did not complete the survey we used Companies House data to identify the industry they operate within. We calculated the average intermediate consumption per worker for these respective industries using data from the ABS and multiplied it by headcount employment in each company to produce an estimate of total procurement. We used a sectoral breakdown of supply chains drawn from the ONS’ published supply-use tables to estimate the distribution of this procurement across sectors.

The modelling for this study used Input-Output (I-O) tables. These tables show, for a specified geography, the goods and services that industries purchase from one another in order to produce their output (as well as their purchases from abroad). We built a UK I-O model which we used to estimate the UK indirect impacts, which includes all UK procurement spending except money spent with other companies based at the Port. The first-round effect was indicated by companies in their survey responses. All subsequent rounds of UK supply chain spending were then estimated using our UK I-O model, accounting for “leakages” such as spending with foreign suppliers.

We also constructed a bespoke I-O model for Portsmouth City Council area which we used to estimate the local indirect impacts. This sub-regional I-O model was developed using national I-O
tables published by the ONS which were adjusted, using official employment data, to reflect the industrial structure and productive capacity of Portsmouth City Council area. Our methodology utilised so-called “Flegg-adjusted Location Quotients (FLQs)”, which are consistent with the latest approaches and evidence in regional I-O modelling and regional science.28

The local indirect impact was estimated using only the share of Port-based procurement spending which was spent with local suppliers (not located within the Port). For the first-round effect, this local procurement spend was indicated by companies in their survey responses. Our sub-regional I-O model estimates all subsequent rounds of purchases along the entire local supply chain, accounting for “leakages” to other parts of the UK or abroad.

Transactions within the I-O model were measured in terms of gross output and were subsequently translated into GDP contributions using ratios of gross value added (GVA) to gross output.

ESTIMATING THE INDUCED IMPACT

The starting point for modelling the induced impact was understanding the wages and salaries paid to people working within Portsmouth International Port. These data were collected through the company survey described above. For companies which did not complete the survey we used the median wage for the industry most relevant to each company from an assessment of Companies House data. The respective median wage for each company was multiplied by the number of workers in each company to estimate the total wages and salaries paid.

For the UK induced impact, the wages and salaries paid to all people working within Portsmouth International Port were included. Oxford Economics used household spending data to model the typical consumption patterns of UK-based households across industrial sectors (such as retail, restaurants and leisure outlets), making an allowance for “leakages” in the form of imports or savings. This demand was then inputted into our UK I-O model to calculate the total GDP and employment associated with this UK wage-financed consumption.

We assumed only people living in Portsmouth City Council area contributed to the local indirect impact. This information was provided by companies in their survey responses. Oxford Economics used household spending data to model the typical consumption patterns of Portsmouth-based households across industrial sectors, making allowances for “leakages” in the form of imports or savings. This demand was then inputted into our sub-regional I-O model to calculate the total GDP and employment associated with this local wage-financed consumption.

The total economic impact of Portsmouth International Port is given by the sum of the direct, indirect and induced impacts.
